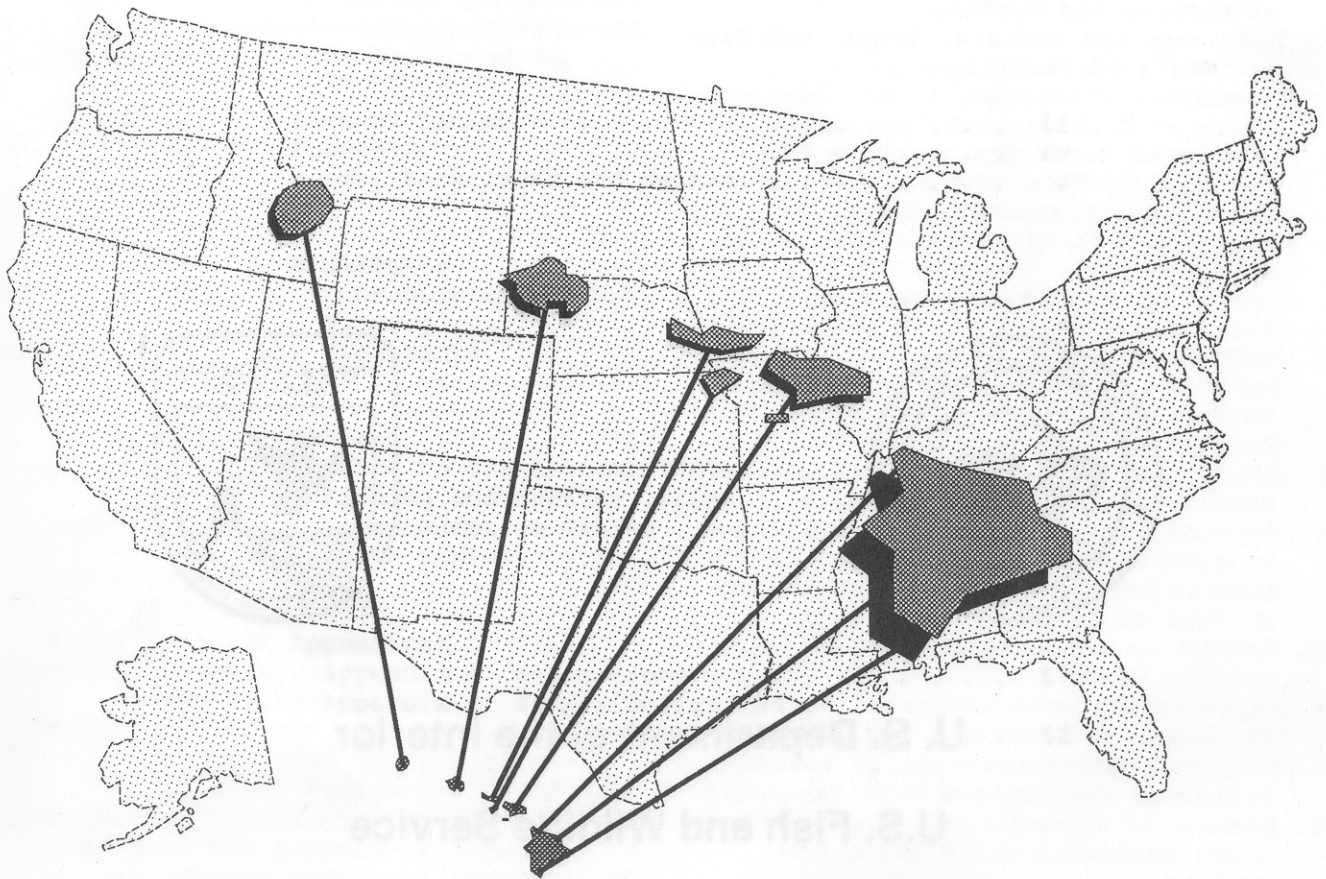


**1985 National  
Survey of Fishing,  
Hunting and  
Wildlife-Associated  
Recreation**



*Hawaii*

1988 National  
Survey of Fishing,  
Hunting and  
Wildlife-Associated  
Recreation



**U. S. Department of the Interior**

**U.S. Fish and Wildlife Service**

**Washington, D. C.**

**March 1989**

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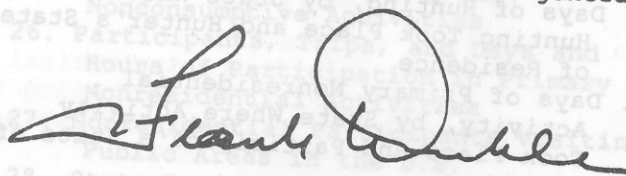
## LIST FOREWORD

Effective stewardship for fish and wildlife requires a combination of biological knowledge and detailed information about the activities of sportsmen and others who make use of these resources. Since 1955, the National Survey of Fishing, Hunting and Wildlife-Associated Recreation has provided detailed information about recreational uses of fish and wildlife. Survey results help managers anticipate new fish and wildlife recreation patterns that require decisions and action.

The 1985 Survey marks the seventh time since 1955 a National survey has been conducted to measure fishing and hunting activities, and it is the second survey to provide details about nonconsumptive wildlife-related activities. The 1985 Survey was requested by State natural resource agencies through the International Association of Fish and Wildlife Agencies. It was designed and conducted by the U.S. Fish and Wildlife Service with the cooperation and assistance of the U.S. Bureau of the Census, and financed by taxes on fishing equipment, boat fuel, hunting equipment, and ammunition under the Federal Aid in Sport Fish and Wildlife Restoration Acts.

More than three of every four Americans enjoyed some type of fish or wildlife activity in 1985, adding over 55 billion dollars to local, State, and National economies. Many of these Americans participated in more than one form of wildlife-associated activity. It is interesting to note that nine out of ten sportsmen (those who fished or hunted) also reported participating in nonconsumptive activities, such as observing, feeding, or photographing wildlife, apart from their sport.

Results from the 1985 Survey will be used by the Federal and State governments and others to forecast demands for fish and wildlife recreation, evaluate impacts on local and State economies, and identify trends in participation and expenditures. These efforts are important for the effective management of fish and wildlife resources for this and future generations.



Frank Dunkle, Director  
Fish and Wildlife Service

United States Department of the Interior

## SURVEY BACKGROUND AND METHOD

The 1985 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation was designed to gather information about American participation in fishing, hunting, and other forms of wildlife-associated recreation. The national survey has been conducted every 5 years since 1955 and represents one of the oldest and most comprehensive continuing recreation surveys. The purpose of the survey is to gather information on the numbers of fishermen and hunters in our country, as well as how often they participate and how much they spend on these activities. The 1985 survey was the first to gather state-level information about those who observe, photograph, or feed wildlife.

The planning process for the 1985 survey began in 1983 when the International Association of Fish and Wildlife Agencies (IAFWA) passed a resolution asking the U.S. Fish and Wildlife Service to conduct a national survey of wildlife-associated recreation in 1985. As with previous national surveys, funding for the survey came from the administrative portion of Federal Aid funds produced by excise taxes on fishing and hunting equipment under the Dingell-Johnson, Pittman-Robertson, and Wallop-Breaux Federal Aid for Fish and Wildlife Restoration Acts.

In early 1984, the IAFWA was asked to help ensure that fish and game agencies of the 50 states had an opportunity to participate in all phases of planning and design of the survey. Four regional technical committees were set up under

the auspices of the IAFWA. Made up of the representatives of state fish and game agencies, the committees served as a point of contact for the survey between the states and the Fish and Wildlife Service. They provided initial suggestions and comments about what information the survey should produce and how it should be conducted. The technical committees reviewed alternatives for survey design, draft questionnaires, and finally, preliminary tabulations of survey results. Reviews of draft materials were also solicited from state fish and game directors and a cross-section of sportsmen's and conservation organizations.

The 1985 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation produced both a national report and individual state reports for the 50 states. The survey was conducted by the U.S. Bureau of the Census in two phases. In the first phase, a sample of almost 111,000 households nationwide was screened, mostly by telephone, to determine who in the household had fished, hunted, or engaged in nonconsumptive wildlife-associated activity in 1985. The screening was done in January-March of 1986. Information about all household members 6 years old and older was obtained from an adult member of each household. A 93 percent response rate was achieved for the screening.

Wildlife-associated recreation includes fishing, hunting, and nonconsumptive wildlife activities. These categories are not mutually exclusive because many individuals enjoy fish and other wildlife resources in several ways.

## SURVEY BACKGROUND AND METHOD

The second phase of the survey consisted of detailed in-person interviews conducted in the spring of 1986 with subsamples of fishermen, hunters, and nonconsumptive participants who were identified in the screening phase. Participants in this detailed phase were limited to those at least 16 years old because of the length and complexity of the questionnaires. Sample sizes were designed to provide statistically reliable results at the state level for fishing, hunting and nonconsumptive activities. A total of 33,973 fishermen and hunters and 30,177 nonconsumptive users were in the detailed sample. Altogether, fishermen and hunters completed 28,011 interviews and there were 26,671 completed interviews with nonconsumptive participants.

In the state of Hawaii, 1473 households were screened for participants in wildlife-associated activities. There were 356 completed interviews with fishermen and hunters and 583 completed interviews with nonconsumptive participants in Hawaii.

In early 1984, the IATWA was asked to help ensure that fish and game agencies of the 50 states had an opportunity to participate in all phases of planning and design of the survey. Four regional technical committees were set up under

## INTRODUCTION

The National Survey of Fishing, Hunting, and Wildlife-Associated Recreation reports results from interviews with Americans about their fishing, hunting and other fish and wildlife recreation. It has become the most important source of information about the vast array of recreational opportunities provided by America's fish and wildlife resources. The 1985 National Survey, the seventh to be conducted since 1955, was requested by the states through the International Association of Fish and Wildlife Agencies. The U.S. Bureau of the Census selected the sample, conducted the interviews and prepared tabulations for this report. The survey was funded by taxes on fishing and hunting equipment and boat fuel under the Dingell-Johnson, Pittman-Robertson and Wallop-Breaux Federal Aid for Sport Fish and Wildlife Restoration Acts.

This report focuses on the 1985 fishing, hunting and nonconsumptive wildlife-related activities of Americans 16 years of age and older. Summary measures are reported for wildlife-associated recreation by those 6 to 15 years of age and for trapping participation by those 6 years old and older. Additional information about the scope and coverage of the survey appears in the Survey Background and Methods section of this report. The remainder of this section provides an overview of how the survey results are reported.

### WILDLIFE-ASSOCIATED RECREATION

Wildlife-associated recreation includes fishing, hunting, and nonconsumptive wildlife activities. These categories are not mutually exclusive because many individuals enjoy fish and other wildlife resources in several ways.

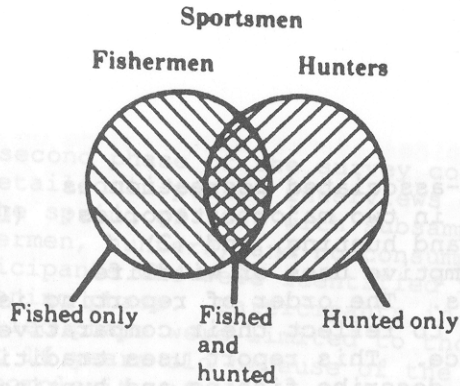
Wildlife-associated recreation is reported in two major categories: (1) fishing and hunting, and (2) nonconsumptive uses of wildlife resources. The order of reporting is not intended to reflect their comparative importance. This report uses traditional terms to describe fishing and hunting. Terms used to report nonconsumptive activities are introduced at the end of this section.

### FISHING AND HUNTING

This survey reports information about residents of the United States who fished or hunted in 1985, regardless of whether they were licensed. The fishing and hunting sections of this report are organized to report three groups: (1) sportsmen, (2) fishermen, and (3) hunters.

### SPORTSMEN

Sportsmen are men and women who fish or hunt. Individuals who fished, hunted or trapped commercially in 1985 are reported as sportsmen only if their recreation included some fishing or hunting. The sportsmen group is composed of the three subgroups in the diagram below: (1) those who fish and hunt, (2) those who fish only, and (3) those who hunt only. The sportsmen group is different from the sum of fishermen plus hunters because it does not double count those who both fish and hunt.



## FISHERMEN

Fishermen are sportsmen who fish and hunt plus those who fish only. The fishermen group includes not only licensed hook and line anglers, but also those who use special fishing methods such as bow and arrow fishing, those who fish in fee ponds, and those who have no license. Three types of fishing are reported. These are fishing in (1) freshwater, except the Great Lakes, (2) Great Lakes, and (3) saltwater. Since many anglers enjoy more than one type of fishing, the total number of fishermen is less than the sum of the three types of fishing.

## HUNTERS

Hunters are sportsmen who fish and hunt plus those who hunt only. The hunter group includes not only licensed hunters using common hunting practices, but also those who hunt with special weapons such as a muzzle loader or a bow and arrow, those who hunt on private preserves, and those who have no license. Four types of hunting are reported. These are hunting for (1) big game, (2) small game, (3) migratory birds, and (4) other animals.

Since many hunters enjoy more than one type of hunting, the sum of hunters for big game, small game, migratory birds and other animals exceeds the total number of hunters.

## NONCONSUMPTIVE WILDLIFE ACTIVITIES

Many Americans, including sportsmen, enjoy wildlife-associated recreation which is not fishing, hunting or trapping. These nonharvesting activities, such as feeding, photographing and observing fish and other wildlife, are nonconsumptive wildlife activities. Four types of nonconsumptive activity are reported. These four types are based on a framework with two criteria: (1) whether the nonconsumptive wildlife use is the primary purpose of the activity or secondary to some other purpose, and (2) whether the nonconsumptive activity is residential (within a mile of the home) or nonresidential (more than a mile from home). Some men and women participate in many or all of the four types of nonconsumptive wildlife activities, so the sum of participants in each type will be greater than the total number of nonconsumptive participants. The four types of nonconsumptive wildlife activities are introduced below.

	Non-residential	Residential
Primary	XX	XX
Secondary	XX	XX

# WILDLIFE-ASSOCIATED RECREATION SPORTSMEN

## PRIMARY NONRESIDENTIAL

This group includes persons who take trips or outings of at least one mile for the primary purpose of observing, photographing or feeding fish and wildlife. Trips to fish or hunt and trips to zoos, circuses, aquariums and museums are not considered nonconsumptive wildlife activities.

## PRIMARY RESIDENTIAL

This group includes those whose activities around the home involve one or more of the following: (1) closely observing or trying to identify birds or other wildlife, (2) photographing wildlife, (3) feeding birds or other wildlife on a regular basis, (4) maintaining natural areas of at least one-quarter acre for which benefit to wildlife is an important concern, (5) maintaining plantings (shrubs, agricultural crops, etc.) for which benefit to wildlife is an important concern, or (6) visiting public parks within one mile of home for the purpose of observing, photographing, or feeding wildlife.

### NONCONSUMPTIVE

Total	457,900
Primary	322,000
Secondary	421,400

Sources: Tables 25 and 32.

## SECONDARY NONRESIDENTIAL

This group includes persons who enjoy seeing or hearing wildlife while on a trip or outing of at least one mile that is taken for another purpose, such as camping, driving for pleasure, or boating. Trips for shopping or to go to work or school are not included.

## SECONDARY RESIDENTIAL

This group is composed of persons who enjoy seeing or hearing wildlife while pursuing other activities around the home, such as those who enjoy birds while doing yard work.

Fishermen	194,900
Fished only	179,900
Fished and hunted	15,000
Hunt only	100,000
Hunted only	100,000
Hunted and fished	100,000
Total	457,900
Source: Table 1.	
* Estimate based on a sample survey.	

## SUMMARY

### Activities by Hawaii residents 16 years old and older

#### FISHING

Fishermen	151,200
Days of fishing	3,312,700
Average days per fisherman	21.9
Total expenditures	\$ 76,558,000
Trip-related	\$ 36,129,000
Equipment and other	\$ 40,430,000
Average per fisherman	\$504
Average per day	\$23

#### HUNTING

Hunters	23,900
Days of hunting	579,000
Average days per hunter	24.3
Total expenditures	\$ 23,239,000
Trip-related	\$ 7,634,000
Equipment and other	\$ 15,605,000
Average per hunter	\$975
Average per day	\$40

#### NONCONSUMPTIVE

Total nonconsumptive participants	458,000
Primary participants	322,000
Nonresidential	80,000
Residential	304,000
Secondary participants	421,000
Nonresidential	244,000
Residential	380,000
Total expenditures	\$123,594,000
Trip-related	\$ 17,713,000
Equipment and other	\$105,882,000

### Activities by participants 16 years old and older in Hawaii

#### FISHING

Fishermen	195,000
Days of fishing	3,488,000
Average days per fisherman	17.9
Total expenditures	NA
Trip-related	\$ 62,868,000
Equipment and other	NA
Average per fisherman	NA
Average per day	NA

#### HUNTING

Hunters	24,000
Days of hunting	547,000
Average days per hunter	23.1
Total expenditures	NA
Trip-related	\$ 5,926,000
Equipment and other	NA
Average per hunter	NA
Average per day	NA

#### PRIMARY NONRESIDENTIAL

Primary nonresidential participants	149,800
Days of participation	1,481,000
Average days per participant	9.9
Total expenditures	NA
Trip-related	\$ 33,906,000
Equipment and other	NA
Average per participant	NA
Average per day	NA

	Non-residential	Residential
Primary	XX	XX
Secondary	XX	XX

## WILDLIFE-ASSOCIATED RECREATION

The 1985 Survey found that 491,300 Hawaii residents 16 years old and older engaged in fishing, hunting, or nonconsumptive activities. Of the total number of participants, 151,200 fished, 23,900 hunted, and 322,000 engaged in nonconsumptive activities where wildlife enjoyment was the primary purpose of the activity (primary nonconsumptive). In addition, there were 421,400 Hawaii residents whose other primary activities were enhanced by the presence of fish and wildlife (secondary nonconsumptive). The sum of fishermen, hunters and nonconsumptive participants exceeds the total number of participants in wildlife-associated recreation because many individuals engaged in more than one wildlife-related activity.

(16 years old and older)	Number
--------------------------	--------

### PARTICIPANTS IN WILDLIFE-ASSOCIATED RECREATION

Total	491,300
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### SPORTSMEN

Total	159,100
Fishermen	151,200
Hunters	23,900

### NONCONSUMPTIVE

Total	457,900
Primary	322,000
Secondary	421,400

Sources: Tables 25 and 32.

## SPORTSMEN

In 1985, there were 203,500 resident and nonresident sportsmen 16 years old and older who fished and/or hunted in Hawaii. This group included 194,900 fishermen (96 percent of all sportsmen) and 23,700 hunters (12 percent of all sportsmen). Of the 203,500 sportsmen who fished or hunted in the state, 179,900 (88 percent) fished but did not hunt in Hawaii. Another 8,600 (4 percent) hunted but did not fish there. The remaining 15,100 (7 percent) both fished and hunted in Hawaii in 1985. For further details about those who fished or hunted in Hawaii, see Table 1.

(16 years old and older)	Number
Sportsmen (fished or hunted)	203,500
Fishermen	194,900
Fished only	179,900
Fished and hunted	15,100
Hunters	23,700
Hunted only	8,600*
Hunted and fished	15,100

Source: Table 1.

\* Estimate based on a small sample size.

## FISHERMEN AND DAYS OF FISHING

Approximately 194,900 residents and nonresidents 16 years old and older fished in Hawaii in 1985. Hawaii residents accounted for 72% of the total and numbered 140,000 fishermen. Nonresidents comprised the remaining 54,900 fishermen, or 28% of the total. Resident and nonresident anglers fished a total of 3,487,600 days in Hawaii, an average of 17.9 days per fisherman. Residents accounted for 3,197,000 days of fishing, or 92% of all fishing days. Nonresidents spent a total of 290,700 days fishing in Hawaii's waters, or 8% of all fishing days. For further details about fishing in Hawaii, see Table 4.

(16 years old and older)	Number
Fishermen	194,900
Resident	140,000
Nonresident	54,900
Days of fishing	3,487,600
Resident	3,197,000
Nonresident	290,700

Source: Table 4.

There were 151,200 Hawaii residents 16 years old and older who fished in the U.S. in 1985. These resident anglers fished for a total of 3,312,700 days in 1985. About 93% of them, or 140,000 fishermen, fished in the state of Hawaii. Most of their days of fishing, 97% (3,197,000 days), were spent in Hawaii.

In addition, some Hawaii residents fished only in other states or fished both in Hawaii and in other states. Altogether, about 14,100 Hawaii anglers (9% of the total) fished as nonresidents in other states. Their 115,700 days of fishing in other states accounted for 3% of all days of fishing by Hawaii residents in 1985. For more details about fishing by Hawaii residents, see Table 4.

(16 years old and older)	Number
Hawaii fishermen	151,200
In Hawaii	140,000
In other states	14,100
Days of fishing by	
Hawaii residents	3,312,700
In Hawaii	3,197,000
In other states	115,700

Source: Table 4.

## HUNTERS AND DAYS OF HUNTING

There were 23,700 resident and nonresident hunters 16 years old and older who hunted in Hawaii in 1985. State residents accounted for 22,100 of these hunters, or 93% of the total. Hunters spent a total of 546,600 days hunting in Hawaii. State residents accounted for 542,200 days of hunting, or 99% of all hunting days.

Hunting in Hawaii by nonresidents and days of hunting by nonresidents were not reported because these estimates were based on sample sizes that were too small to report data reliably. For additional information on hunting activities in Hawaii, see Table 10.

(16 years old and older)	Number
Hunters	23,700
Resident	22,100
Nonresident	...
Days of hunting	546,600
Resident	542,200
Nonresident	...

Source: Table 10.

... Sample size too small to report data reliably.

There were 23,900 state residents 16 years old and older who hunted in the U.S. in 1985. About 93% of them, or 22,100 hunters, hunted in the state of Hawaii. Of the total 579,000 days of hunting by Hawaii residents in 1985, 542,200 days (94% of the total), were spent hunting in Hawaii.

Hunting by state residents in other States and days of hunting in other States were not reported because these estimates were based on sample sizes that were too small to report data reliably. For further details about hunting by Hawaii residents, see Table 10.

(16 years old and older)	Number
Hawaii hunters	23,900
In Hawaii	22,100
In other states	...
Days of hunting by	
Hawaii residents	579,000
In Hawaii	542,200
In other states	...

Source: Table 10.

... Sample size too small to report data reliably.

Source: Table 26.

## PRIMARY NONCONSUMPTIVE ACTIVITIES

About 79,700 residents of Hawaii 16 years old and older took trips of 1 mile or more in the U.S. for the primary purpose of observing, photographing, or feeding wildlife in 1985. Of this total, 78,700 observed wildlife, 44,500 photographed wildlife, and 54,500 fed wildlife while on these primary nonresidential trips.

Hawaii residents spent 1,145,400 days participating in primary nonresidential activities in 1985. While on their trips, primary nonresidential participants observed wildlife on 1,104,900 days, photographed wildlife on 319,100 days, and fed wildlife on 406,600 days. Since some individuals engaged in more than one of the three primary nonresidential activities during the year, the sum of wildlife observers, photographers, and feeders exceeds the total number of primary nonresidential participants. Similarly, the sum of days of observing, photographing, and feeding wildlife exceeds the total days of primary nonresidential activity because individuals engage in more than one activity on some days. For further details about Hawaii residents participating in primary nonresidential activities see Table 26.

(16 years old and older)      Number

### PRIMARY NONRESIDENTIAL PARTICIPANTS

Total	79,700
Observe wildlife	78,700
Photograph wildlife	44,500
Feed wildlife	54,500

### DAYS OF PARTICIPATION

Total	1,145,400
Observe wildlife	1,104,900
Photograph wildlife	319,100
Feed wildlife	406,600

Source: Table 26.

Many Hawaii residents took an active interest in wildlife around their homes in 1985. This type of activity, where wildlife was the primary focus, is termed "primary residential" in this report. There were 304,100 Hawaii residents who participated in some primary residential activity in 1985. These activities included observing wildlife (171,200 participants), photographing wildlife (60,500 participants), feeding wildlife (223,000 participants), visiting public parks and natural areas within 1 mile of home for the purpose of observing, photographing, or feeding wildlife (49,300 participants), maintaining natural areas of 1/4 acre or more (24,600 participants) and maintaining food or cover plants to benefit wildlife (26,900 participants). Adding the participants in these six activities results in a sum that exceeds the total number of primary residential participants because many people participated in more than one primary residential activity. For further details about Hawaii residents participating in primary residential activities see Table 28.

(16 years old and older)      Number

### PRIMARY RESIDENTIAL PARTICIPANTS

Total	304,100
Observe wildlife	171,200
Photograph wildlife	60,500
Feed wildlife	223,000
Visit public parks	49,300
Maintain natural areas	24,600
Maintain plantings	26,900

Source: Table 28.

## FISHING AND HUNTING EXPENDITURES

Hawaii residents 16 years old and older spent \$76,557,600 in Hawaii and other states for fishing in 1985. Trip-related expenditures for food and lodging, transportation, and other trip costs such as equipment rental and boat fuel totaled \$36,128,600 (47% of fishing expenditures). Purchases of licenses, stamps, tags, and permits amounted to \$284,000 and accounted for less than .5 percent of all fishing expenditures. Expenditures for equipment purchased primarily for fishing accounted for \$40,020,600, or 52% of the total amount spent by Hawaii residents in 1985. Purchases of fishing equipment (rods, reels, lines, etc.) were \$9,836,200 (13%). Expenditures for special and auxiliary equipment (items purchased primarily for fishing but that can be used in activities other than fishing, such as tents, campers, and boats) totaled \$30,184,400 (39%). Expenditures for other items purchased primarily for fishing (magazines, membership dues and contributions, and land leasing/ownership) totaled \$124,700\* (less than .5 percent). For further details about fishing expenditures by Hawaii residents, see Table 19.

(16 years old and older) Amount

### FISHING EXPENDITURES

Total	\$76,557,600
Trip-related	\$36,128,600
Equipment	\$40,020,600
Fishing	\$ 9,836,200
Special and auxiliary	\$30,184,400
Licenses, stamps, tags, and permits	\$ 284,000
Other	\$ 124,700*

Source: Table 19.

\* Estimate based on a small sample size.

Hawaii residents 16 years old and older spent \$23,238,800 in Hawaii and other states for hunting in 1985. Trip-related expenditures for food and lodging, transportation, and other trip costs such as equipment rental and boat fuel totaled \$7,633,700 (33% of hunting expenditures). Purchases of licenses, stamps, tags, and permits amounted to \$143,500\* and accounted for 1% of all hunting expenditures. Expenditures for equipment purchased primarily for hunting accounted for \$11,611,200, or 50% of the total amount spent by Hawaii residents in 1985. Purchases of hunting equipment (guns, ammunition, etc.) were \$6,494,400\* (28%). Expenditures for special and auxiliary equipment (items purchased primarily for hunting but that can be used in activities other than hunting, such as tents, campers, and boats) totaled \$5,116,800\* (22%). Estimates of expenditures for other items purchased primarily for hunting (magazines, membership dues and contributions, and land leasing/ownership) were based on sample sizes that were too small to report data reliably. For further details about hunting expenditures by Hawaii residents, see Table 20.

(16 years old and older) Amount

### HUNTING EXPENDITURES

Total	\$23,238,800
Trip-related	\$ 7,633,700
Equipment	\$11,611,200
Hunting	\$ 6,494,400*
Special and auxiliary	\$ 5,116,800*
Licenses, stamps, tags, and permits	\$ 143,500*
Other	\$ ...

Source: Table 20.

\* Estimate based on a small sample size.

... Sample size too small to report data reliably.

## NONCONSUMPTIVE EXPENDITURES

Hawaii residents 16 years old and older spent \$123,594,000 in Hawaii and other states for nonconsumptive wildlife-associated recreation in 1985. Expenditures for primary trip-related items, including food and lodging, transportation, and other trip costs such as equipment rental and boat fuel totaled \$17,712,900 (14% of total nonconsumptive expenditures). Expenditures for equipment purchased primarily for use in nonconsumptive activities were \$104,008,700, or 84% of the total amount spent by Hawaii residents in 1985. Purchases of nonconsumptive equipment (binoculars, field guides, etc.) were \$18,703,800 (15%). Expenditures for special and auxiliary equipment (items purchased primarily for use in nonconsumptive activities but that can be used in other activities, such as tents, campers, and boats) totaled \$85,304,900 (69%). Expenditures for other items purchased primarily for use in nonconsumptive activities (magazines, membership dues and contributions) totaled \$1,872,700 (2%). For further details about nonconsumptive expenditures by Hawaii residents, see Table 30.

(16 years old and older) Amount

### NONCONSUMPTIVE EXPENDITURES

Total	\$123,594,000
Trip-related	\$ 17,712,900
Equipment	\$104,008,700
Nonconsumptive	\$ 18,703,800
Special and auxiliary	\$ 85,304,900
Other	\$ 1,872,700

Source: Table 30.

## TRIP-RELATED EXPENDITURES

In 1985, resident and nonresident participants in wildlife-associated recreation spent a total of \$102,699,900 in Hawaii for trip-related items, such as food, lodging, and transportation. Trip-related expenditures for fishing totaled \$62,867,900 (61% of the total). Hunters spent \$5,926,000 (6%) for trip-related items in Hawaii. Trip-related expenditures for primary nonresidential activities accounted for the remaining \$33,906,000 (33%).

Resident and nonresident fishermen spent a total of \$26,690,900 on food and lodging while fishing in Hawaii. Expenditures for transportation and other trip costs (equipment rental, guide fees, land use fees, etc.) totaled \$35,510,600 in 1985.

Food and lodging expenditures by resident and nonresident hunters during hunting trips in Hawaii totaled \$2,891,400. Hunting trip expenditures in Hawaii for transportation and other trip costs (equipment rental, guide fees, land use fees, etc.) totaled \$3,034,700 in 1985. For additional information regarding trip-related expenditures in Hawaii, see Tables 22 and 45.

(16 years old and older) Amount

### TRIP-RELATED EXPENDITURES

Total	\$102,699,900
Fishing	\$ 62,867,900
Hunting	\$ 5,926,000
Primary nonresidential	\$ 33,906,000
Fishing	\$ 62,867,900
Food and lodging	\$ 26,690,900
Transportation and other	\$ 35,510,600
Hunting	\$ 5,926,000
Food and lodging	\$ 2,891,400
Transportation and other	\$ 3,034,700

Sources: Tables 22 and 45.

## GUIDE TO STATISTICAL TABLES

The statistical tables of this report were designed to meet a wide range of needs of those interested in knowing about wildlife-associated recreation. Special terms used in these tables are defined in Appendix A.

The tables are based on responses to the 1985 Survey which was designed to learn about American participation in wildlife-associated recreation. To take part in the survey a respondent must have been a U.S. resident (a resident of one of the fifty states or the District of Columbia). No one residing outside the U.S. (including U.S. citizens) was eligible for a survey interview. Therefore, reported state and national totals do not include participation by those who were not U.S. residents.

Information reported for those 16 years old and older is based upon interviews with respondents in this age group. Reported results for those 6 to 15 years old are based upon interviews with an older member of the same household.

### COVERAGE OF AN INDIVIDUAL TABLE

Since the survey covers many activities in various places by participants of different ages, each table's title, captions, stubs and footnotes are designed to identify and articulate each item being reported in the table. For example, the title of Table 1 shows that individuals, including both residents of the state and nonresidents, who fished or hunted in the state are being reported. By contrast, the title of Table 2 shows that it reports state residents who fished or hunted, regardless of whether they fished or hunted in state or in other states.

### PERCENTAGES REPORTED IN THE TABLES

Percentages are reported in the tables for the convenience of the user of the information. When exclusive groups are being reported, the base of a percentage is apparent from its context because the percents add to 100 percent (plus or minus a rounding error). For example, Table 1 reports the number of sportsmen who fished only, those who fished and hunted, and those who hunted but did not fish. These form 100 percent because they are exclusive groups.

Percents should not add to 100 when non-exclusive groups are being reported. Using Table 1 as an example again, note that adding the percentages associated with total fishermen and total hunters will not equal total sportsmen because fishermen and hunters are not exclusive groups.

When the base of the percentage may not be apparent in context, it is identified in a footnote. For example, Table 2 reports two percentages with different bases for the convenience of those who will use either or both kinds of information. Therefore, footnotes are used to clarify the bases of the reported percentages.

## FOOTNOTES TO THE TABLES

Footnotes are used to clarify the information or items that are being reported in a table. Symbols in the body of a table may indicate important footnotes. These symbols are used in the tables to refer to the same footnote each time they appear:

- \* Estimate based on a small sample size.
- ... Sample size too small to report data reliably.
- W Less than .5 dollars.
- Z Less than .5 percent.
- X Not applicable.

Estimates based upon fewer than ten responses are regarded as being based on a sample size that is too small for reliable reporting. An estimate based upon at least ten but fewer than 25 responses is treated as an estimate based on a small sample size. Other footnotes appear, as necessary, to qualify or clarify the estimates reported in the tables.

In addition, these two important footnotes appear frequently:

- Detail does not add to total because of multiple responses.
- Detail does not add to total because of multiple responses and nonresponse.

"Multiple responses" is a term used to reflect the fact that individuals or their characteristics fall into more than one category. Using Table 3 for examples, those who fished in saltwater and freshwater appear in each of these totals. Yet each fisherman is represented once in the "Total, all fishing" row. Similarly, those who hunt for big game and small game are counted only once as a hunter. Therefore, totals may be smaller than the sum of subcategories when multiple responses are appropriate.

"Nonresponse" exists because the survey's questions were answered voluntarily. Some respondents did not answer all questions. The effect of nonresponses may be illustrated by Table 16, where the reported total for fishing and hunting expenditures may be than the sum of reported fishing expenditures plus reported hunting expenditures. This occurs because some respondents did not respond to the questions about the primary purpose of their expenditures. As a result, it is known that the expenditures were for fishing or hunting, but it is not known that they can be allocated to either fishing or hunting. In general, totals are greater than the sum of subcategories when nonresponses have occurred.

**TABLE 1. FISHING AND HUNTING IN-STATE, BY RESIDENT AND NONRESIDENT SPORTSMEN: 1985**

HAWAII

(16 YEARS OLD AND OLDER. NUMBERS IN THOUSANDS)

ACTIVITY IN STATE	TOTAL, RESIDENTS AND NONRESIDENTS		RESIDENTS		NONRESIDENTS	
	NUMBER	PERCENT OF SPORTSMEN	NUMBER	PERCENT OF SPORTSMEN	NUMBER	PERCENT OF SPORTSMEN
TOTAL, FISHING OR HUNTING . . .	203.5	100	147.6	100	55.9	100
TOTAL, FISHING. . .	194.9	96	140.0	95	54.9	98
FISHED ONLY . . .	179.9	88	125.5	85	54.4	97
FISHED AND HUNTED	15.1	7	14.5	10	...	...
TOTAL, HUNTING. . .	23.7	12	22.1	15	...	...
HUNTED ONLY . . .	8.6*	4*	7.6*	5*	...	...
HUNTED AND FISHED	15.1	7	14.5	10	...	...

NOTE: DETAIL DOES NOT ADD TO TOTAL BECAUSE OF MULTIPLE RESPONSES.

\* ESTIMATE BASED ON A SMALL SAMPLE SIZE.

... SAMPLE SIZE TOO SMALL TO REPORT DATA RELIABLY.

**TABLE 2. STATE RESIDENTS PARTICIPATING IN FISHING AND HUNTING: 1985**

HAWAII

(NUMBERS IN THOUSANDS)

ACTIVITY	16 YEARS OLD AND OLDER			12 YEARS OLD AND OLDER			9 YEARS OLD AND OLDER			6 YEARS OLD AND OLDER		
	PERCENT OF SPORTSMEN			PERCENT OF SPORTSMEN			PERCENT OF SPORTSMEN			PERCENT OF SPORTSMEN		
	MEN			MEN			MEN			MEN		
	NUMBER	GROUP	PERCENT OF POPULATION	NUMBER	GROUP	PERCENT OF POPULATION	NUMBER	GROUP	PERCENT OF POPULATION	NUMBER	GROUP	PERCENT OF POPULATION
TOTAL, FISHING OR HUNTING . . .	159.1	100	20	179.4	100	21	189.2	100	21	198.9	100	21
TOTAL, FISHING. . .	151.2	95	19	171.2	95	20	181.1	96	20	190.8	96	20
FISHED ONLY . . .	135.2	85	17	154.6	86	18	164.0	87	18	173.7	87	19
FISHED AND HUNTED	16.0	10	2	16.7	9	2	17.1	9	2	17.1	9	2
TOTAL, HUNTING. . .	23.9	15	3	24.8	14	3	25.3	13	3	25.3	13	3
HUNTED ONLY . . .	7.9*	5*	1*	8.2*	5*	1*	8.2*	4*	1*	8.2*	4*	1*
HUNTED AND FISHED	16.0	10	2	16.7	9	2	17.1	9	2	17.1	9	2

NOTE: DETAIL DOES NOT ADD TO TOTAL BECAUSE OF MULTIPLE RESPONSES.

COLUMNS SHOWING PERCENT OF SPORTSMEN ARE BASED ON THE TOTAL, FISHING OR HUNTING ROW. COLUMNS SHOWING PERCENT OF POPULATION ARE BASED ON THE STATE POPULATION IN EACH AGE CATEGORY, INCLUDING THOSE WHO DID NOT FISH OR HUNT. DATA REPORTED ON THIS TABLE FOR THOSE UNDER 16 YEARS OF AGE ARE FROM SCREENING INTERVIEWS IN WHICH ONE ADULT HOUSEHOLD MEMBER RESPONDED FOR ALL HOUSEHOLD MEMBERS.

\* ESTIMATE BASED ON A SMALL SAMPLE SIZE

**TABLE 3. RESIDENT FISHERMEN AND HUNTERS, DAYS OF PARTICIPATION, AND TRIPS, BY TYPE OF FISHING AND HUNTING: 1985**

HAWAII

(STATE RESIDENTS 16 YEARS OLD AND OLDER. NUMBERS IN THOUSANDS)

TYPE OF FISHING AND HUNTING	PARTICIPANTS		DAYS OF PARTICIPATION		TRIPS	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
<b>FISHING</b>						
TOTAL, ALL FISHING . . . . .	151.2	100	3312.7	100	3144.8	100
TOTAL, ALL FRESHWATER. . . . .	21.2	14	151.8	5	134.6	4
FRESHWATER, EXCEPT GREAT LAKES	21.2	14	151.8	5	134.6	4
GREAT LAKES. . . . .	...	...	...	...	...	...
SALTWATER. . . . .	137.3	91	3170.0	96	3010.2	96
<b>HUNTING</b>						
TOTAL, ALL HUNTING . . . . .	23.9	100	579.0	100	689.2	100
BIG GAME . . . . .	20.9	88	444.9	77	552.3	80
SMALL GAME . . . . .	8.1*	34*	61.4*	11*	54.5*	8*
MIGRATORY BIRDS. . . . .	...	...	...	...	...	...
OTHER ANIMALS. . . . .	...	...	...	...	...	...

NOTE: DETAIL DOES NOT ADD TO TOTAL BECAUSE OF MULTIPLE RESPONSES.

\* ESTIMATE BASED ON A SMALL SAMPLE SIZE.

... SAMPLE SIZE TOO SMALL TO REPORT DATA RELIABLY.

**TABLE 4. FISHERMEN AND HUNTERS, TRIPS, AND DAYS AND HOURS OF PARTICIPATION: 1985**

HAWAII

(16 YEARS OLD AND OLDER. NUMBERS IN THOUSANDS)

FISHERMEN AND HUNTERS, TRIPS, DAYS AND HOURS OF PARTICIPATION	ACTIVITY IN STATE						ACTIVITY BY STATE RESIDENTS					
	TOTAL, STATE RESIDENTS AND NONRESIDENTS		STATE RESIDENTS		NONRESIDENTS		TOTAL, IN STATE OF RESIDENCE AND IN OTHER STATES		IN STATE OF RESIDENCE		IN OTHER STATES	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
<b>FISHING</b>												
TOTAL FISHERMEN. . . . .	194.9	100	140.0	72	54.9	28	151.2	100	140.0	93	14.1	9
TOTAL TRIPS. . . . .	3197.3	100	3059.6	96	137.8	4	3144.8	100	3059.6	97	84.9	3
TRIPS FOR THE PRIMARY PURPOSE OF FISHING . . . . .	2592.9	100	2505.5	97	87.4*	3*	2569.9	100	2505.5	97	63.8	2
TOTAL DAYS OF FISHING. . . . .	3487.6	100	3197.0	92	290.7	8	3312.7	100	3197.0	97	115.7	3
AVERAGE DAYS OF FISHING. . . . .	17.9	(X)	22.8	(X)	5.3	(X)	21.9	(X)	22.8	(X)	8.2	(X)
AVERAGE HOURS PER DAY OF FISHING . . . . .	5.7	(X)	5.7	(X)	5.5	(X)	5.7	(X)	5.7	(X)	5.4	(X)
AVERAGE ONE-WAY DISTANCE TRAVELED PER TRIP. . . . .	28.4	(X)	16.1	(X)	302.0	(X)	18.6	(X)	16.1	(X)	109.9	(X)
<b>HUNTING</b>												
TOTAL HUNTERS. . . . .	23.7	100	22.1	93	...	...	23.9	100	22.1	93	...	...
TOTAL TRIPS. . . . .	670.9	100	657.8	98	...	...	689.2	100	657.8	95	...	...
TRIPS FOR THE PRIMARY PURPOSE OF HUNTING . . . . .	294.7	100	293.7	100	...	...	322.1	100	293.7	91	...	...
TOTAL DAYS OF HUNTING. . . . .	546.6	100	542.2	99	...	...	579.0	100	542.2	94	...	...
AVERAGE DAYS OF HUNTING. . . . .	23.1	(X)	24.5	(X)	...	(X)	24.3	(X)	24.5	(X)	...	(X)
AVERAGE HOURS PER DAY OF HUNTING . . . . .	6.6	(X)	6.6	(X)	...	(X)	6.6	(X)	6.6	(X)	...	(X)
AVERAGE ONE-WAY DISTANCE TRAVELED PER TRIP. . . . .	27.4	(X)	26.3	(X)	...	(X)	31.3	(X)	26.3	(X)	...	(X)

NOTE: DETAIL DOES NOT ADD TO TOTAL BECAUSE OF MULTIPLE RESPONSES.

(X) NOT APPLICABLE.

\* ESTIMATE BASED ON A SMALL SAMPLE SIZE.

... SAMPLE SIZE TOO SMALL TO REPORT DATA RELIABLY.

**TABLE 5. FRESHWATER FISHERMEN, TRIPS, DAYS AND HOURS OF FISHING,  
AND TYPE OF WATER: 1985**

HAWAII

(16 YEARS OLD AND OLDER. NUMBERS IN THOUSANDS. EXCLUDES GREAT LAKES FISHING)

FISHERMEN, TRIPS, DAYS AND HOURS OF FISHING	ACTIVITY IN STATE						ACTIVITY BY STATE RESIDENTS					
	TOTAL, STATE RESIDENTS AND NONRESIDENTS		STATE RESIDENTS		NONRESIDENTS		TOTAL, IN STATE OF RESIDENCE AND IN OTHER STATES		IN STATE OF RESIDENCE		IN OTHER STATES	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
TOTAL FISHERMEN . . . . .	11.4	100	10.7	93	...	...	21.2	100	10.7	50	11.5	54
TOTAL TRIPS . . . . .	65.4	100	64.7	99	...	...	134.6	100	64.7	48	70.0	52
TRIPS FOR THE PRIMARY PURPOSE OF FISHING . .	47.5*	100*	47.4*	100*	...	...	99.3	100	47.4*	48*	51.9	52
TOTAL DAYS OF FISHING . .	53.4	100	52.7*	99*	...	...	151.8	100	52.7*	35*	99.2	65
AVERAGE DAYS OF FISHING .	4.7	(X)	4.9*	(X)	...	(X)	7.2	(X)	4.9*	(X)	8.6	(X)
AVERAGE HOURS PER DAY OF FISHING . . . . .	4.3	(X)	4.3	(X)	...	(X)	4.9	(X)	4.3	(X)	5.2	(X)
AVERAGE ONE-WAY DISTANCE TRAVELED PER TRIP . . .	17.9	(X)	15.6	(X)	...	(X)	70.7	(X)	15.6	(X)	121.4	(X)
FISHERMEN												
TOTAL, ALL TYPES OF WATER	11.4	100	10.7	93	...	...	21.2	100	10.7	50	11.5	54
MANMADE IMPOUNDMENTS . .	6.1*	100*	6.1*	100*	...	...	10.9	100	6.1*	55*	5.6*	51*
NATURAL LAKES OR PONDS . .	...	...	...	...	...	...	8.3*	100*	...	...	7.4*	89*
RIVERS OR STREAMS . . . .	...	...	...	...	...	...	6.8*	100*	...	...	5.5*	81*
DAYS OF FISHING												
TOTAL, ALL TYPES OF WATER	53.4	100	52.7	99	...	...	151.8	100	52.7	35	99.2	65
MANMADE IMPOUNDMENTS . .	43.6*	100*	43.6*	100*	...	...	91.4	100	43.6*	48*	47.9*	52*
NATURAL LAKES OR PONDS . .	...	...	...	...	...	...	50.0*	100*	...	...	39.0*	78*
RIVERS OR STREAMS . . . .	...	...	...	...	...	...	64.5*	100*	...	...	50.8*	79*

NOTE: DETAIL DOES NOT ADD TO TOTAL BECAUSE OF MULTIPLE RESPONSES.

(X) NOT APPLICABLE.

\* ESTIMATE BASED ON A SMALL SAMPLE SIZE.

... SAMPLE SIZE TOO SMALL TO REPORT DATA RELIABLY.

TABLE 6. FRESHWATER FISHERMEN AND DAYS OF FISHING, BY TYPE OF FISH: 1985

HAWAII

(16 YEARS OLD AND OLDER. NUMBERS IN THOUSANDS. EXCLUDES GREAT LAKES FISHING)

FISHERMEN AND DAYS OF FISHING	ACTIVITY IN STATE						ACTIVITY BY STATE RESIDENTS					
	TOTAL, STATE RESIDENTS AND NONRESIDENTS		STATE RESIDENTS		NONRESIDENTS		TOTAL, IN STATE OF RESIDENCE AND IN OTHER STATES		IN STATE OF RESIDENCE		IN OTHER STATES	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
FISHERMEN												
TOTAL, ALL TYPES OF FISH	11.4	100	10.7	93	...	...	21.2	100	10.7	50	11.5	54
CATFISH, BULLHEADS. . .	...	...	...	...	...	...	3.9*	100*	...	...	...	...
TROUT. . . . .	...	...	...	...	...	...	7.5*	100*	...	...	6.9*	93*
DAYS OF FISHING												
TOTAL, ALL TYPES OF FISH	53.4	100	52.7	99	...	...	151.8	100	52.7	35	99.2	65
CATFISH, BULLHEADS. . .	...	...	...	...	...	...	20.2*	100*	...	...	...	...
TROUT. . . . .	...	...	...	...	...	...	82.3*	100*	...	...	81.2*	99*

NOTE: DETAIL DOES NOT ADD TO TOTAL BECAUSE OF MULTIPLE RESPONSES.

EXCLUDES SPECIES WHERE THE ESTIMATE OF THE TOTAL IN STATE WAS BASED ON A SAMPLE SIZE THAT WAS TOO SMALL TO REPORT DATA RELIABLY.

\* ESTIMATE BASED ON A SMALL SAMPLE SIZE.

... SAMPLE SIZE TOO SMALL TO REPORT DATA RELIABLY.

TABLE 4. FISHERMEN AND HUNTERS, TRIPS, AND DAYS AND HOURS OF PARTICIPATION: 1985

FISHERMEN AND HUNTERS, TRIPS, DAYS AND HOURS OF PARTICIPATION	ACTIVITY IN STATE						ACTIVITY BY STATE RESIDENTS					
	TOTAL, STATE RESIDENTS AND NONRESIDENTS		STATE RESIDENTS		NONRESIDENTS		TOTAL, IN STATE OF RESIDENCE AND IN OTHER STATES		IN STATE OF RESIDENCE		IN OTHER STATES	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
FISHING												
TOTAL FISHERMEN. . . . .	198.8	100	180.0	92	28.8	100	180.0	100	180.0	93	14.1	8
TOTAL TRIPS. . . . .	3197.3	100	3059.6	96	137.7	100	3197.3	100	3059.6	97	84.9	3
TRIPS FOR THE PRIMARY PURPOSE OF FISHING. . . . .	2592.9	100	2505.3	97	87.6	100	2592.9	100	2505.3	97	83.8	2
TOTAL DAYS OF FISHING. . . . .	3487.6	100	3197.0	92	290.6	100	3197.6	100	3197.6	97	115.7	3
AVERAGE DAYS OF FISHING. . . . .	17.6	(X)	22.8	(X)	5.0	(X)	21.3	(X)	22.8	(X)	8.2	(X)
AVERAGE HOURS PER DAY OF FISHING. . . . .	5.7	(X)	5.7	(X)	0.0	(X)	5.7	(X)	5.7	(X)	5.4	(X)
AVERAGE ONE-WAY DISTANCE TRAVELED PER TRIP. . . . .	28.4	(X)	16.1	(X)	12.3	(X)	18.3	(X)	16.1	(X)	109.9	(X)
HUNTING												
TOTAL HUNTERS. . . . .	22.7	100	22.1	97	0.6	100	22.7	100	22.1	97	...	...
TOTAL TRIPS. . . . .	670.9	100	657.8	98	13.1	100	670.9	100	657.8	98	...	...
TRIPS FOR THE PRIMARY PURPOSE OF HUNTING. . . . .	294.7	100	293.7	100	1.0	100	294.7	100	293.7	91	...	...
TOTAL DAYS OF HUNTING. . . . .	546.6	100	543.2	99	3.4	100	546.6	100	543.2	94	...	...
AVERAGE DAYS OF HUNTING. . . . .	24.1	(X)	24.5	(X)	0.0	(X)	24.3	(X)	24.5	(X)	...	(X)
AVERAGE HOURS PER DAY OF HUNTING. . . . .	6.6	(X)	6.6	(X)	...	(X)	6.6	(X)	6.6	(X)	...	(X)
AVERAGE ONE-WAY DISTANCE TRAVELED PER TRIP. . . . .	27.4	(X)	26.3	(X)	...	(X)	31.3	(X)	26.3	(X)	...	(X)

NOTE: DETAIL DOES NOT ADD TO TOTAL BECAUSE OF MULTIPLE RESPONSES.

(X) NOT APPLICABLE.

\* ESTIMATE BASED ON A SMALL SAMPLE SIZE.

... SAMPLE SIZE TOO SMALL TO REPORT DATA RELIABLY.

TABLE 7. GREAT LAKES FISHERMEN, TRIPS, DAYS AND HOURS OF FISHING: 1985

(NOT APPLICABLE TO THIS STATE)

**TABLE 8. GREAT LAKES FISHERMEN AND DAYS OF FISHING, BY TYPE OF FISH: 1985**

(NOT APPLICABLE TO THIS STATE)

**TABLE 9. SALTWATER FISHERMEN, TRIPS, DAYS AND HOURS OF FISHING,  
TYPE OF WATER, AND MODE OF FISHING: 1985**

## HAWAII

(16 YEARS OLD AND OLDER. NUMBERS IN THOUSANDS. EXCLUDES GREAT LAKES FISHING)

FISHERMEN, TRIPS, DAYS AND HOURS OF FISHING	ACTIVITY IN STATE						ACTIVITY BY STATE RESIDENTS					
	TOTAL, STATE RESIDENTS AND NONRESIDENTS		STATE RESIDENTS		NONRESIDENTS		TOTAL, IN STATE OF RESIDENCE AND IN OTHER STATES		IN STATE OF RESIDENCE		IN OTHER STATES	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
TOTAL FISHERMEN. . . . .	189.7	100	135.2	71	54.6	29	137.3	100	135.2	98	...	...
TOTAL TRIPS. . . . .	3132.0	100	2995.0	96	137.0	4	3010.2	100	2995.0	99	...	...
TRIPS FOR THE PRIMARY PURPOSE OF FISHING . . . . .	2545.4	100	2458.2	97	87.3*	3*	2470.7	100	2458.2	99	...	...
TOTAL DAYS OF FISHING. . . . .	3442.1	100	3152.2	92	289.9	8	3170.0	100	3152.2	99	...	...
AVERAGE DAYS OF FISHING. . . . .	18.1	(X)	23.3	(X)	5.3	(X)	23.1	(X)	23.3	(X)	...	(X)
AVERAGE HOURS PER DAY OF FISHING . . . . .	5.7	(X)	5.8	(X)	5.5	(X)	5.8	(X)	5.8	(X)	...	(X)
AVERAGE ONE-WAY DISTANCE TRAVELED PER TRIP. . . . .	28.6	(X)	16.1	(X)	302.4	(X)	16.3	(X)	16.1	(X)	...	(X)
TYPE OF WATER												
TOTAL FISHERMEN. . . . .	189.7	100	135.2	71	54.6	29	137.3	100	135.2	98	...	...
DEEP SEA (MORE THAN 3 MILES OFF SHORE) . . . . .	48.3	100	26.2	54	22.2	46	26.8	100	26.2	98	...	...
OFFSHORE (.2 TO 3 MILES OFF SHORE) . . . . .	68.8	100	40.3	59	28.5*	41*	40.9	100	40.3	99	...	...
SURF AND SHORE (LESS THAN .2 MILES OFF SHORE) . . . . .	112.6	100	97.8	87	...	...	99.3	100	97.8	98	...	...
SOUNDS AND BAYS. . . . .	12.7	100	10.7	84	...	...	11.4	100	10.7	93	...	...
TIDAL RIVERS AND STREAMS . . . . .	4.3*	100*	4.1*	94*	...	...	4.8*	100*	4.1*	84*	...	...
MODE OF FISHING												
TOTAL FISHERMEN. . . . .	189.7	100	135.2	71	54.6	29	137.3	100	135.2	98	...	...
PARTY OR CHARTER BOAT. . . . .	40.3	100	5.8*	14*	34.5*	86*	6.6*	100*	5.8*	87*	...	...
PRIVATE OR RENTAL BOAT . . . . .	47.1	100	38.1	81	9.0*	19*	40.0	100	38.1	95	...	...
SURF OR SHORE. . . . .	124.8	100	102.1	82	22.7*	18*	103.1	100	102.1	99	...	...
BRIDGE, PIER OR JETTY. . . . .	19.3	100	17.8	93	...	...	19.0	100	17.8	94	...	...

NOTE: DETAIL DOES NOT ADD TO TOTAL BECAUSE OF MULTIPLE RESPONSES.

(X) NOT APPLICABLE.

\* ESTIMATE BASED ON A SMALL SAMPLE SIZE.

... SAMPLE SIZE TOO SMALL TO REPORT DATA RELIABLY.

**TABLE 10. HUNTERS, TRIPS, AND DAYS AND HOURS OF HUNTING,  
BY TYPE OF HUNTING: 1985**

HAWAII

(16 YEARS OLD AND OLDER. NUMBERS IN THOUSANDS)

HUNTERS, TRIPS, DAYS, AND HOURS OF HUNTING	ACTIVITY IN STATE						ACTIVITY BY STATE RESIDENTS					
	TOTAL, STATE RESIDENTS AND NONRESIDENTS		STATE RESIDENTS		NONRESIDENTS		TOTAL, IN STATE OF RESIDENCE AND OTHER STATES		IN STATE OF RESIDENCE		IN OTHER STATES	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
<b>HUNTERS</b>												
TOTAL, ALL HUNTING. . .	23.7	100	22.1	93	...	...	23.9	100	22.1	93	...	...
BIG GAME. . . . .	21.8	100	20.2	93	...	...	20.9	100	20.2	96	...	...
SMALL GAME. . . . .	7.3*	100*	6.7*	92*	...	...	8.1*	100*	6.7*	83*	...	...
MIGRATORY BIRD. . .	...	...	...	...	...	...	...	...	...	...	...	...
OTHER ANIMALS . . .	...	...	...	...	...	...	...	...	...	...	...	...
<b>TRIPS</b>												
TOTAL, ALL HUNTING. . .	670.9	100	657.8	98	...	...	689.2	100	657.8	95	...	...
BIG GAME. . . . .	547.6	100	543.3	99	...	...	552.3	100	543.3	98	...	...
SMALL GAME. . . . .	42.4*	100*	39.1*	92*	...	...	54.5*	100*	39.1*	72*	...	...
MIGRATORY BIRD. . .	...	...	...	...	...	...	...	...	...	...	...	...
OTHER ANIMALS . . .	...	...	...	...	...	...	...	...	...	...	...	...
<b>TRIPS FOR THE PRIMARY PURPOSE OF HUNTING</b>												
TOTAL, ALL HUNTING. . .	294.7	100	293.7	100	...	...	322.1	100	293.7	91	...	...
BIG GAME. . . . .	255.5	100	254.5	100	...	...	263.6	100	254.5	97	...	...
SMALL GAME. . . . .	33.6*	100*	33.6*	100*	...	...	48.5*	100*	33.6*	69*	...	...
MIGRATORY BIRD. . .	...	...	...	...	...	...	...	...	...	...	...	...
OTHER ANIMALS . . .	...	...	...	...	...	...	...	...	...	...	...	...
<b>DAYS OF HUNTING</b>												
TOTAL, ALL HUNTING. . .	546.6	100	542.2	99	...	...	579.0	100	542.2	94	...	...
BIG GAME. . . . .	437.5	100	433.1	99	...	...	444.9	100	433.1	97	...	...
SMALL GAME. . . . .	46.9*	100*	43.6*	93*	...	...	61.4*	100*	43.6*	71*	...	...
MIGRATORY BIRD. . .	...	...	...	...	...	...	...	...	...	...	...	...
OTHER ANIMALS . . .	...	...	...	...	...	...	...	...	...	...	...	...
<b>AVERAGE HOURS PER DAY OF HUNTING</b>												
TOTAL, ALL HUNTING. . .	6.6	(X)	6.6	(X)	...	(X)	6.6	(X)	6.6	(X)	...	(X)
BIG GAME. . . . .	7.5	(X)	7.5	(X)	...	(X)	7.5	(X)	7.5	(X)	...	(X)
SMALL GAME. . . . .	8.1*	(X)	8.5*	(X)	...	(X)	7.6*	(X)	8.5*	(X)	...	(X)
MIGRATORY BIRD. . .	...	(X)	...	(X)	...	(X)	...	(X)	...	(X)	...	(X)
OTHER ANIMALS . . .	...	(X)	...	(X)	...	(X)	...	(X)	...	(X)	...	(X)

NOTE: DETAIL DOES NOT ADD TO TOTAL BECAUSE OF MULTIPLE RESPONSES.

(X) NOT APPLICABLE.

\* ESTIMATE BASED ON A SMALL SAMPLE SIZE.

... SAMPLE SIZE TOO SMALL TO REPORT DATA RELIABLY.

TABLE 11. HUNTERS AND DAYS OF HUNTING IN-STATE, BY TYPE OF GAME: 1985

## HAWAII

(16 YEARS OLD AND OLDER. NUMBERS IN THOUSANDS)

TYPE OF GAME	HUNTERS, STATE RESIDENTS AND NONRESIDENTS		DAYS OF HUNTING	
	NUMBER	PERCENT	NUMBER	PERCENT
TOTAL, ALL TYPES OF GAME	23.7	100	546.6	100
BIG GAME, TOTAL. . . . .	21.8	92	437.5	80
SMALL GAME, TOTAL. . . . .	7.3*	31*	46.9*	9*
PHEASANT . . . . .	4.6*	19*	30.9*	6*

NOTE: DETAIL DOES NOT ADD TO TOTAL BECAUSE OF MULTIPLE RESPONSES.  
EXCLUDES SPECIES WHERE THE ESTIMATE OF THE TOTAL IN STATE WAS BASED ON  
A SAMPLE SIZE THAT WAS TOO SMALL TO REPORT DATA RELIABLY.

\* ESTIMATE BASED ON A SMALL SAMPLE SIZE.

TABLE 12. HUNTERS AND DAYS OF HUNTING IN-STATE, BY TYPE OF LAND: 1985

HAWAII

(16 YEARS OLD AND OLDER. NUMBERS IN THOUSANDS)

HUNTERS AND DAYS OF HUNTING	TOTAL, STATE RESIDENTS AND NONRESIDENTS		STATE RESIDENTS		NONRESIDENTS	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
HUNTERS						
TOTAL, ALL TYPES OF LAND. . .	23.7	100	22.1	100	...	...
PUBLIC LAND, TOTAL. . . . .	20.5	87	18.9	86	...	...
PUBLIC LAND ONLY. . . . .	16.1*	68*	14.5*	66*	...	...
PUBLIC AND PRIVATE LAND	4.5*	19*	4.5*	20*	...	...
PRIVATE LAND, TOTAL. . . . .	7.3*	31*	7.3*	33*	...	...
PRIVATE LAND ONLY. . . . .	...	...	...	...	...	...
PUBLIC AND PRIVATE LAND	4.5*	19*	4.5*	20*	...	...
DAYS OF HUNTING						
TOTAL, ALL TYPES OF LAND. . .	546.6	100	542.2	100	...	...
PUBLIC LAND (1) . . . . .	524.6	96	511.5	94	...	...
PRIVATE LAND (2) . . . . .	157.6	29	157.6	29	...	...

NOTE: DETAIL DOES NOT ADD TO TOTAL BECAUSE OF MULTIPLE RESPONSES AND NONRESPONSE.

(1) DAYS OF HUNTING ON PUBLIC LAND INCLUDES BOTH DAYS SPENT SOLELY ON PUBLIC LAND AND THOSE SPENT ON PUBLIC AND PRIVATE LAND.

(2) DAYS OF HUNTING ON PRIVATE LAND INCLUDES BOTH DAYS SPENT SOLELY ON PRIVATE LAND AND THOSE SPENT ON PUBLIC AND PRIVATE LAND.

\* ESTIMATE BASED ON A SMALL SAMPLE SIZE.

... SAMPLE SIZE TOO SMALL TO REPORT DATA RELIABLY.

TABLE 13. HUNTERS AND DAYS OF HUNTING ON PUBLIC LAND IN-STATE: 1985

HAWAII

(16 YEARS OLD AND OLDER. NUMBERS IN THOUSANDS)

HUNTERS AND DAYS OF HUNTING	TOTAL, STATE RESIDENTS AND NONRESIDENTS		STATE RESIDENTS		NONRESIDENTS	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
HUNTERS						
TOTAL, ALL PUBLIC LAND. . . . .	20.5	100	18.9	100	...	...
FEDERAL . . . . .	6.7*	32*	...	...	...	...
STATE WILDLIFE AREA . . . . .	6.2*	30*	5.2*	27*	...	...
OTHER STATE AREA. . . . .	9.0*	44*	9.0*	47*	...	...
LOCAL . . . . .	...	...	...	...	...	...
UNSPECIFIED PUBLIC LAND (1) . .	...	...	...	...	...	...
DAYS OF HUNTING						
TOTAL, ALL PUBLIC LAND. . . . .	524.6	100	511.5	100	...	...
FEDERAL . . . . .	41.4*	8*	...	...	...	...
STATE WILDLIFE AREA . . . . .	137.6*	26*	136.6*	27*	...	...
OTHER STATE AREA. . . . .	297.9*	57*	297.9*	58*	...	...
LOCAL . . . . .	...	...	...	...	...	...
UNSPECIFIED PUBLIC LAND (1) . .	...	...	...	...	...	...

NOTE: DETAIL DOES NOT ADD TO TOTAL BECAUSE OF MULTIPLE RESPONSES AND NONRESPONSE.

(1) RESPONDENT WAS UNABLE TO SAY WHETHER THE PUBLICLY HELD AREA WAS OWNED BY FEDERAL, STATE, OR LOCAL GOVERNMENT.

\* ESTIMATE BASED ON A SMALL SAMPLE SIZE.

... SAMPLE SIZE TOO SMALL TO REPORT DATA RELIABLY.